

**SCIENCE, AERONAUTICS AND TECHNOLOGY**

**FISCAL YEAR 2003 ESTIMATES**

**BUDGET SUMMARY**

**OFFICE OF SPACE FLIGHT**

**SPACE OPERATIONS**

**SUMMARY OF RESOURCES REQUIREMENTS**

|  | FY 2001<br>OP PLAN<br><u>REVISED</u> | FY 2002<br>INITIAL<br>OP PLAN | FY 2003<br>PRES<br>BUDGET | Page<br>Number |
|--|--------------------------------------|-------------------------------|---------------------------|----------------|
| Operations.....  | 361.2                                | [318.8]                       | [82.1]                    | SAT 5-2        |
| Mission and Data Service Upgrades .....                        | 73.8                                 | [25.4]                        | [1.4]                     | SAT 5-3        |
| Tracking and Data Relay Satellite System Replenishment Project | 50.9                                 | [117.5]                       | [16.5]                    | SAT 5-4        |
| Technology.....  | 35.8                                 | [20.5]                        | [17.5]                    | SAT 5-5        |
| [Reimbursements [non-add]] .....                               | [[43.0]]                             | [[45.0]]                      | [[45.0]]                  |                |
| Total .....  | <u>521.7</u>                         | <u>[482.2]</u>                | <u>[117.5]</u>            |                |

**Distribution of Program Amount by Installation**

|                                    |              |                |                |
|------------------------------------|--------------|----------------|----------------|
| Johnson Space Center .....         | 247.6        | [26.9]         | [21.0]         |
| Kennedy Space Center .....         | 37.1         | [74.2]         | [8.9]          |
| Marshall Space Flight Center ..... | 9.5          | [72.8]         | [57.1]         |
| Dryden Space Flight Center .....   | 12.8         | [12.4]         | [0.0]          |
| Glenn Research Center .....        | 8.6          | [3.5]          | [3.4]          |
| Goddard Space Flight Center .....  | 79.9         | [111.0]        | [14.3]         |
| Jet Propulsion Laboratory.....     | 123.9        | [175.2]        | [7.5]          |
| Headquarters .....                 | 2.3          | [6.2]          | [5.3]          |
| Total .....                        | <u>521.7</u> | <u>[482.2]</u> | <u>[117.5]</u> |

Note – FY 2002 and FY 2003 data for comparison purposes only. See Space Communications and Data Systems under the HSF appropriation to discuss FY 2002 and FY 2003 activity.

**BASIS OF FY 2003 FUNDING REQUIREMENT****OPERATIONS**

|  | FY 2001               | FY 2002        | FY 2003       |
|--|-----------------------|----------------|---------------|
|  | (Millions of Dollars) |                |               |
| Space Network .....                        | 7.0                   | --             | --            |
| Deep Space Network .....                   | 142.2                 | [154.3]        | --            |
| Ground Network .....                       | 33.6                  | [39.6]         | [1.0]         |
| Wide Area Network .....                    | 99.7                  | [77.0]         | [57.1]        |
| Western Aeronautical Test Range .....      | 12.5                  | [12.0]         | --            |
| Spectrum Management .....                  | 4.5                   | [2.5]          | [0.6]         |
| Standards Management .....                 | 0.3                   | [0.7]          | [0.7]         |
| Operations Integration                     | 58.8                  | [28.8]         | [18.8]        |
| Navigation and Communications Architecture | --                    | [0.3]          | [0.3]         |
| Program Management Support                 | 2.6                   | [3.6]          | [3.6]         |
| Total .....                                | <u>361.2</u>          | <u>[318.8]</u> | <u>[82.1]</u> |

Note - See Space Communications and Data Systems section under the HSF appropriation to discuss FY 2001 activity.

**BASIS OF FY 2003 FUNDING REQUIREMENT****MISSION AND DATA SERVICES UPGRADES**

|                        | <u>FY 2001</u>        | <u>FY 2002</u> | <u>FY 2003</u> |
|------------------------|-----------------------|----------------|----------------|
|                        | (Millions of Dollars) |                |                |
| Mission Services ..... | 33.9                  | --             | --             |
| Data Services .....    | <u>39.9</u>           | <u>[25.4]</u>  | <u>[1.4]</u>   |
| Total .....            | 73.8                  | <u>[25.4]</u>  | <u>[1.4]</u>   |

Note - See Space Communications and Data Systems section under the HSF appropriation to discuss FY 2001 activity.

**BASIS OF FY 2003 FUNDING REQUIREMENT**

**TRACKING AND DATA RELAY SATELLITE REPLENISHMENT PROJECT**

(Thousands of Dollars)

|                              | <u>FY 2001</u>        | <u>FY 2002</u> | <u>FY 2003</u> |
|------------------------------|-----------------------|----------------|----------------|
|                              | (Millions of Dollars) |                |                |
| Spacecraft Development ..... | 14.0                  | [44.5]         | [8.8]          |
| Launch Services .....        | <u>36.9</u>           | <u>[73.0]</u>  | <u>[7.7]</u>   |
| Total.....                   | <u>50.9</u>           | <u>[117.5]</u> | <u>[16.5]</u>  |

Note - See Space Communications and Data Systems section under the HSF appropriation to discuss FY 2001 activity.

**BASIS OF FY 2003 FUNDING REQUIREMENT**

| <b><u>TECHNOLOGY</u></b>                        | <b><u>FY 2001</u></b> | <b><u>FY 2002</u></b> | <b><u>FY 2003</u></b> |
|---|-----------------------|-----------------------|-----------------------|
|   | (Millions of Dollars) |                       |                       |
| Advanced Communications .....                   | 12.0                  | [13.9]                | [13.6]                |
| Space Internet.....                             | 2.1                   | [0.6]                 | [0.3]                 |
| Virtual Space Presence.....                     | 4.7                   | --                    | --                    |
| Autonomous Mission Operations .....             | 5.9                   | [0.9]                 | --                    |
| Advanced Guidance, Navigation, and Control..... | 3.9                   | [2.6]                 | [1.0]                 |
| Standards.....                                  | 4.8                   | [2.5]                 | [2.6]                 |
| Technology Program Support .....                | <u>2.4</u>            | --                    | --                    |
| Total.....                                      | 35.8                  | <u>[20.5]</u>         | <u>[17.5]</u>         |

Note - See Space Communications and Data Systems section under the HSF appropriation to discuss FY 2001 activity.